BRITISH COLUMBIA | BCStats

Infoline

Contact: bcstats.infoline@gov.bc.ca Issue: 11-47 November 25, 2011

- **Retail sales inch ahead 0.2% in September; flat during the third quarter**
- **Productivity in BC's business sector rose 1.2% in 2010**
- **Manufacturing sales up 2.0% gain during the third quarter**

The Economy

- **Retail sales in British Columbia advanced at a comparatively sluggish 0.2% (*seasonally adjusted*) in September, a slowdown in growth from the previous month (+0.7%).** While sales at clothing & accessories stores (+1.6%), sporting goods, hobby, book & music shops (+1.3%) and motor vehicles & parts dealers (+1.3%) were higher, these were largely offset by sharp declines in revenues earned at building materials & garden supplies stores (-2.8%). Sales were also weaker at furniture & home furnishings (-1.2%) and food & beverage (-0.4%) stores.

  At the national level, retail sales rose 1.0% in September. Sales were up in all provinces, with Nova Scotia (+2.4%) and Newfoundland & Labrador (+2.1%) posting the largest increases. However, the largest contributions in dollar terms came from Alberta (+1.6%) and Ontario (+1.0%). *Data Source: Statistics Canada & BC Stats*

- **Wholesalers in British Columbia saw revenues rise 0.5% (*seasonally adjusted*) in September, led by stronger motor vehicle sales.** Nationally, wholesale sales increased 0.3%, marking a fifth straight monthly increase. Growth was largely concentrated in Saskatchewan (+7.3%) and Alberta (+2.0%). In all, six provinces registered lower wholesale sales, with PEI (-5.5%), New Brunswick (-4.0%) and Newfoundland & Labrador (-3.1%) being the hardest hit. *Data Source: Statistics Canada*

Labour Productivity

- **Labour productivity in British Columbia's business sector was up 1.2% in 2010 as the sector's real gross domestic product (+3.5%) expanded faster than the total number of hours worked (+2.4%).** Real GDP growth in the business sector was mainly concentrated in goods-producing industries, primarily manufacturing, forestry, construction and support services for mining & oil and gas extraction. Forestry, mining and retail trade were the main sources for growth in the number of hours worked.

  Nationally, labour productivity rose 1.9% in 2010, with all provinces registering increases. New Brunswick (+4.1%), Saskatchewan (+3.7%), Newfoundland & Labrador (+3.4%), Alberta (+2.9%) and PEI (+2.7%) all posted rates above the national average. BC's increase in labour productivity ranked sixth among the provinces. *Data Source: Statistics Canada*

Aboriginals in the Labour Market

- **Between 2008 and 2010, the employment rate (employment as a percent of the total population aged 15 and over) for British Columbia's core-aged Aboriginal population (those 25 to 54 years) declined 8.2 percentage points.** This was the second-largest drop in the country (the employment rate in Quebec declined 9.7 percentage points).

  BC's core-aged Aboriginal population saw employment rates sink from 70.9% in 2008 to just 62.7% in 2010. Prior to the economic downturn in 2008, BC's core-aged Aboriginal

Report **Estimating Population: Census, Survey or Administrative Record**

Did you know...

British Columbians expect to spend an average of $674 on Christmas gifts in 2011. Gift-givers in Atlantic Canada expect to spend the most ($877), while Quebecers are expected to spend the least ($461) on gifts during the holidays. *Data Source: Ipsos Canada*

population had an employment rate that was similar to the national average (70.8%). However, by 2010, the rate had fallen to a level well below the national average (65.8%).

While non-Aboriginals of core age in British Columbia also saw a decline in the rate of employment (-2.5 percentage points) during this period, it was far less than that experienced by Aboriginals in the same age-group.

Data Source: SC Cat. no. 71-588-X

- **The participation rate (the proportion of the population either working or looking for work) among the core-aged Aboriginal population also dropped sharply (-7.0 percentage points) between 2008 and 2010.** In 2008, labour force participation among core-aged Aboriginal people was at 78.9%, slightly ahead of the national average (78.0%) and third highest in the country after Alberta (81.0%) and Quebec (80.7%). However, by the end of 2010, this cohort's participation rate had fallen to 71.9% in BC, well below the national average (75.0%) and second lowest in Canada.

  The decline in the core-aged Aboriginal participation rate in BC is even more pronounced when compared to non-Aboriginals in the same age-group. Between 2008 and 2009, the participation rate for non-Aboriginals was down slightly from 85.5% to 85.1%. By 2010 though, the participation rate for core-aged non-Aboriginals was once again at 85.5%.

  Data Source: SC Cat. no. 71-588-X

Third Quarter 2011 in Review

- **Sales generated at British Columbia's retail outlets remained virtually unchanged (*seasonally adjusted*) during the third quarter.** While revenues expanded at general merchandise (+2.3%), clothing & accessory (+1.5%) and food & beverage (+0.8%) stores, sales slumped at gasoline stations (-4.4%), health & personal care stores (-2.2%), electronics & appliance stores (-1.6%) and building materials & garden supplies stores (-1.5%).

  Nationally, retail sales were up 0.8% during the third quarter with increases in every province with the exception of British Columbia. Prince Edward Island (+1.9%) and Saskatchewan (+1.7%) posted the largest increases compared to the previous quarter.

  Data Source: Statistics Canada & BC Stats

- **Revenues earned by manufacturers in British Columbia rose 2.0% (*seasonally adjusted*) during the third quarter with the increase primarily driven by gains among producers of durable goods (+3.5%).** Despite a decline in the value of wood products shipped (-1.8%), substantial growth was recorded in sales of transportation equipment (+19.1%) and primary metals (+10.9%). On the non-durables (+0.5%) side, beverages & tobacco (+2.0%) and paper (+1.1%) manufacturers were the only ones to register any appreciable gains. *Data Source: Statistics Canada*

- **During the third quarter, wholesale sales in British Columbia edged 1.0% higher (*seasonally adjusted*).** This was the fifth consecutive quarterly increase in provincial wholesale sales. Nationally, revenues generated by wholesalers advanced 2.1% during the third quarter. Prince Edward Island (+6.2%) posted the largest quarter gains, followed by increases in Manitoba (+5.1%) and Alberta (+5.0%). *Data Source: Statistics Canada*

The Nation

- **Operating profits of Canadian corporations dipped 0.5% (*seasonally adjusted*) during the third quarter.** This decline was largely driven by the insurance industry where profits fell $2.1 billion, resulting in a loss of $452 million. Overall, profits in the financial sector slumped 11.0%. The non-financial sector saw total operating profits rise 3.1% due to significant increases in the retail (+13.6%) and mining (+9.6%) industries.

  Data Source: Statistics Canada

Infoline Issue: 11-47
November 25, 2011

For data originating from Statistics Canada, data sourced to 'Statistics Canada' has been retrieved from CANSIM, the agency's electronic database; otherwise the source is identified as 'SC' plus the catalogue number.

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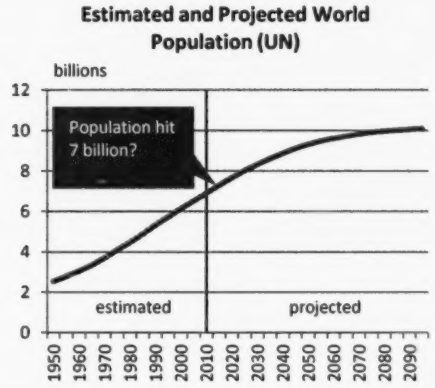
Estimating Population: Census, Survey or Administrative Record

On October 31st, according to the United Nations (UN), the world population topped 7 billion people. However, the organization itself admits "...that its own figures come with a 1-2% margin of error. Today's population could actually be 56 million higher or lower than seven billion... ."[1] In fact the U.S. Census Bureau doesn't think the world population will reach 7 billion until March or April of 2012. [2] Though only a small difference, less than one half of one percent, it reflects the inherent uncertainty in estimating and projecting populations.



Source: United Nations Population Division

In order to estimate the world population each agency uses a variety of sources such as census and survey data, vital statistics and administrative data. Some of these sources are reliable but lack relevance while others are relevant but lack reliability. For example, the 2006 Census counts are reliable but are they relevant in 2011?

Conversely the Voter's Registration list which may be as relevant as the most recent election may not be as reliable as the Census. Where the Census is mandatory, registering to vote is voluntary and an individual isn't required to remove themselves from the list if they decide to change residences. The utility of using more than one source is to balance these key attributes.

Estimating BC's Population

While the population of BC is slightly less than 7 billion, according to the latest estimate it was more than 4.5 million as of July 1, 2011, estimating its population is still a challenging task.

Statistics Canada produces a BC level population estimate on a quarterly basis, as well as annual estimates for a limited number of sub-provincial areas.[3] These estimates are based on the most recent Census, post-enumeration surveys and administrative records. An example of administrative data is income tax records. Statistics Canada uses this information to approximate the migration characteristics of the Canadian population.

The province of BC requires population estimates not only for the province as a whole but also for smaller areas within BC such as municipalities and local health authorities. In response, BC STATS uses a combination of the latest estimates from Statistics Canada as well as provincial and federal administrative data to produce population estimates and projections for a variety of sub-provincial areas.

[1] Rahman, R. (2011) *The World at Seven Billion.* Retrieved November 14, 2011 from http://www.bbc.co.uk/news/magazine-15494349

[2] Goodkind, D. (2011) *The World Population at 7 billion* Retrieved November 14, 2011 from http://blogs.census.gov/censusblog/population/

[3] These include census divisions (BC regional districts), census metropolitan areas and economic regions (BC development regions)

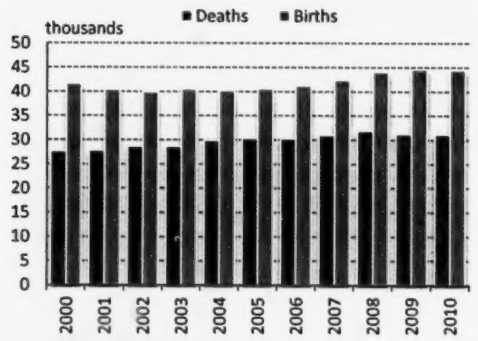
Administrative data generated and collected through the operations of programs and delivery of services can be important tools for demographic studies. However, these data records should be timely, accurate and preferably universal in scope in order to be reliable sources of information.

This article hopes to shed light on some of the administrative data used by BC STATS when analyzing the population and demographic situation of BC.

BC Vital Statistics

Data collected by the BC Vital Statistics Agency (VSA) are an excellent example of timely and accurate information. The BC VSA provides BC STATS with the number of births and deaths that have occurred in the province. It is usually received within three to four months after the reference period and is relatively accurate. This information is used extensively for population analysis and most importantly to measure the natural change (births minus deaths) of the population. It is also used to calculate fertility, mortality and life expectancy which in turn are used as input for the population projections.

BC Births and Deaths: 2000 to 2010



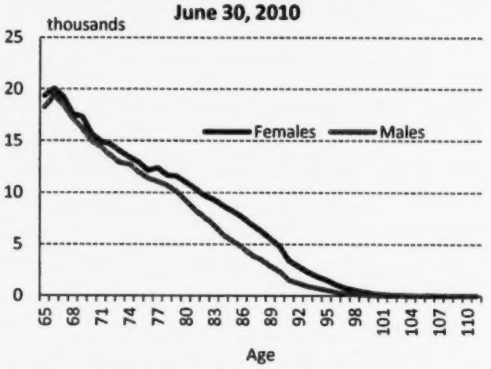
Source: BC Vital Statistics Agency

Federal Old Age Security and Canadian Child Tax Benefit

Data from these two federal programs provide information about the population in two age groups; those who are aged 65 and older and those who are under 18.

Old Age Security (OAS) data are available by single year of age and sex. It is used in analyzing the age, gender and regional distribution of the BC senior population. The results of these analyses are an integral part of the population projection model particularly in forming the base population by sub-provincial region.

OAS Recipients by Age and Sex in BC: June 30, 2010



Source: Old Age Security Program, Human Resources and Skills Development Canada

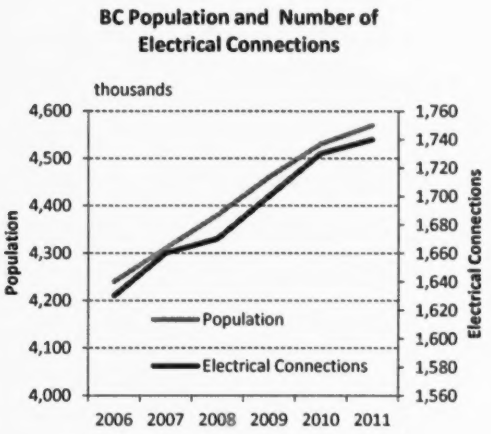
In a similar manner data from the Canadian Child Tax Benefit (CCTB) have been used in a limited capacity to analyze the distribution of the younger population. The limitation is due to the nature of the CCTB; it isn't a universal program so some segments of the population aren't included.

Public Utility Records

Public utility data such as residential electrical connections have been shown to provide useful insights about the formation

and dissolution of households in most regions of the province. By calibrating this information with population changes observed in the past, these data can be used as input for developing population estimates.

The following chart plots the number of residential electrical connections alongside the estimated BC population for the last five years.



Source: BC Hydro, Fortis, other independent power companies and Statistics Canada

Annual data from BC Hydro, along with those from Fortis BC and a few other independent power supply companies, are a major indicator used in the BC STATS Generalized Estimation System (GES). GES produces annual population estimates for all BC municipalities and un-incorporated areas. These estimates have been used to support many government functions such as determining the transfer of funds between the province and local jurisdictions.

In the past, other information such as telephone data (Telus account records) have been used as indicators for population estimates. Data from Telus are no longer used in the model due to the increasing trend of land lines being replaced by cellular phones. In order for an indicator to be useful, it should accurately reflect the entire population not just a segment.

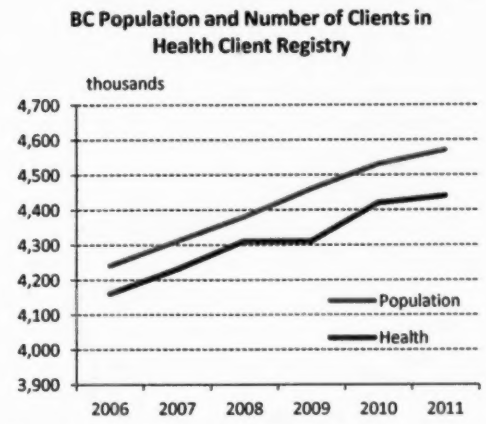
For more information on GES please see the methodological report "Generalization Estimation System (GES) Small Area Population Estimation"[4] or the Infoline article "GESing Sub-Provincial Population in B.C."[5] (2010)

Health Client Registry

Data collected by the Ministry of Heath for the BC Health Client Registry are another important input for the GES. By calibrating the population changes in the registry with changes in residential electrical connections, the GES is able to produce population estimates for the corresponding year. The advantage of using data from the Health Client Registry is that it covers the majority of the residents living in the province, and information regarding client residences is relatively up to date. The relevance of this data for the GES system is indicated by the degree of statistical significance reported by the regression analysis within the estimation model. Data from the Health Client Registry are considered to be one of the most important sources for analyzing population distribution and growth in small areas of BC.

[4] BC Stats. August 2011. <http://www.bcstats.gov.bc.ca/data/pop/pop/MethodGES_Aug2011.pdf>

[5] Cocco, A. March 5, 2010. <http://www.bcstats.gov.bc.ca/releases/info2010/in1009.pdf>



Source: MSP Health Client Registry and Statistics Canada

A Note on Confidentiality

It should be noted that these data often contain information of a confidential nature and as a result; processes to secure and protect the data are of utmost importance. Whether it's entering into an Information Sharing Agreement with the provider, storing the data on a secure server, limiting who has access to the data and/or removing personal identifiers, the first priority of BC STATS and the provider is to ensure the confidentiality and security of the data.

Conclusion

Administrative data that is timely, accurate and universal in-scope can be invaluable when it comes to population and demographic analysis. However it can't provide all of the answers or give a complete picture of the demographic situation. Only when it's combined with Census and survey information and an understanding of factors affecting population change can a reasonably accurate portrayal be developed.

Infoline

November 25, 2011
Issue 11–47

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also on the Internet at www.bcstats.gov.bc.ca or choose RSS

BC at a glance . . .

POPULATION (thousands)	Jul 1/2011	% change on one year ago
BC	4,573.3	1.0
Canada	34,482.8	1.0
GDP and INCOME (Released Nov 8)		
(BC - at market prices)	2010	% change on one year ago
Gross Domestic Product (GDP) *($ millions)*	203,147	5.9
GDP *($ 2002 millions)*	167,140	3.0
GDP *($ 2002 per Capita) (reflects revised pop)*	36,899	1.4
Personal Disposable Income *($ 2002 per Capita)*	26,166	2.2
TRADE ($ millions, seasonally adjusted)		% change on prev. month
Manufacturing Shipments - Sep 2011	3,208	0.1
Merchandise Exports - Sep 2011	3,173	17.5
Retail Sales - Sep 2011	4,959	0.2
CONSUMER PRICE INDEX	% change on	12-month avg
(all items - Oct 2011)	one year ago	% change
BC	2.3	2.4
Vancouver	2.1	2.3
Victoria	2.1	2.2
Canada	2.9	2.8
LABOUR FORCE (thousands)		% change on
(seasonally adjusted)	Oct 2011	prev. month
Jobs Created (-Lost) - BC	-10.8	
Labour Force - BC	2,450.3	-0.6
Employed - BC	2,288.9	-0.5
Unemployed - BC	161.4	-2.9
		Sep 2011
Unemployment Rate - BC *(percent)*	6.6	6.7
Unemployment Rate - Canada *(percent)*	7.3	7.1
INTEREST RATES (percent)	Nov 23/2011	Nov 24/2010
Prime Business Rate	3.00	3.00
Conventional Mortgages - 1 year	3.50	3.35
- 5 year	5.29	5.44
US-CANADA EXCHANGE RATE	Nov 23/2011	Nov 24/2010
(avg. noon spot rate) Cdn $ per US $	1.0480	1.0108
(closing rate) US $ per Cdn $	0.9537	0.9890
AVERAGE WEEKLY WAGE RATE		% change on
(industrial aggregate - dollars)	Oct 2011	one year ago
BC	842.87	2.0
Canada	842.19	1.5

SOURCES:

Population, Gross Domestic Product, Trade, Prices, Labour Force, Wage Rate } Statistics Canada

Interest Rates, Exchange Rates: Bank of Canada Weekly Financial Statistics

For latest Weekly Financial Statistics see www.bankofcanada.ca

Open Data

Statistics Canada is implementing a new dissemination model. As of November 29, 2011, the majority of geography products will be available free of charge on their website and licensing restrictions will be removed. On February 1, 2012, the CANSIM database will be free to access and standard Census products will be free. In addition, Statistics Canada will no longer charge fees for the right to redistribute its information. Organizations will be encouraged to redistribute information under terms and conditions similar to the Government of Canada Open Data Licence Agreement for Unrestricted Use of Canada's Data. The objective of the new dissemination model is to provide users with maximum benefit from statistical information about Canada's economy and society.

Regional Employment Projections

Updated projections of employment by industry and occupation are now available. The data offers regional detail for College Regions and Development Regions with estimates for 2010 and projections for 2015.

http://www.bcstats.gov.bc.ca/data/lss/repm.asp

Small Business Profile, 2011

The 2011 Edition of the annual profile of small business in British Columbia is now available. The report provides information on British Columbia's small businesses, including number of businesses, employment and small business' contribution to the provincial economy.

http://www.bcstats.gov.bc.ca/data/bus_stat/busind/sm_bus/SBP2011.pdf

Released this week by BC Stats

- No periodical releases

Next week

- Quarterly Regional Statistics, 3rd Quarter 2011
- Business Indicators, November 2011
- Labour Force Statistics, November 2011
- Earnings & Employment Trends, Nov. 2011

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